

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

1. (currently amended): A constellation information transmitting arrangement for a multi-carrier transmitter or a multi-carrier receiver of a multi-carrier system, said arrangement comprising:

means for producing carrier constellation information indicative for constellations where respective carriers will be modulated with by said multi-carrier transmitter; and

means for transmitting said carrier constellation information,

wherein said means for producing said carrier constellation information is adapted to group carriers in subsets and to produce for at least one respective ~~carrier~~-subset a limited set of parameter values from which constellations of ~~all~~-each carriers in said at least one respective ~~carrier~~-subset can be ~~retrieved~~derived through interpolation.

2. (currently amended): The constellation information transmitting arrangement according to claim 1.

wherein said limited set of parameter values ~~consists of~~comprises a first number of bits and a first gain value.

3. (currently amended): The constellation information transmitting arrangement according to claim 1.

wherein said limited set of parameter values ~~consists of~~comprises a first number of bits, a first gain value and a second gain value.

4. (currently amended): The constellation information transmitting arrangement according to claim 3.

wherein said constellations of ~~all~~each carriers in said at least one respective ~~carrier~~ subset can be ~~retrieved~~derived through linear interpolation.

5. (currently amended): The constellation information transmitting arrangement according to claim 1, further comprising:

means to produce a description of said at least one respective ~~carrier~~ subset; and

means to transmit said description of said at least one respective ~~carrier~~ subset.

6. (previously amended): The constellation information transmitting arrangement according to claim 1,

wherein N carriers are divided into M subsets of N/M carriers with successive carrier indices, N being a first integer number representing a total amount of carriers used in said multi-carrier system, and M representing a second integer number whereby N is an integer multiple of M.

7. (currently amended): A constellation information receiving arrangement for a multi-carrier transmitter or a multi-carrier receiver of a multi-carrier system, said arrangement comprising:

means for receiving carrier constellation information indicative for constellations where respective carriers will be modulated with by said multi-carrier transmitter; and

means for determining said constellations from said carrier constellation information.

wherein carriers are grouped in subsets in said carrier constellation information, and wherein said means for determining said constellations comprises

interpolating means adapted to ~~retrieve~~derive constellations of ~~all each~~ carriers in at least one respective ~~carrier~~-subset from a respective limited set of parameter values that forms part of said carrier constellation information.

8. (currently amended): The constellation information receiving arrangement according to claim 7.

wherein said limited set of parameter values ~~consists of~~comprises a first number of bits and a first gain value<sub>1</sub> and

~~in that wherein~~ said interpolating means is adapted to determine for each carrier in said at least one respective ~~carrier~~-subset a number of bits equal to said first number and a gain value equal to said first gain value.

9. (currently amended): The constellation information receiving arrangement according to claim 7.

wherein said limited set of parameter values ~~consists of~~comprises a first number of bits, a first gain value and a second gain value, and

wherein said interpolating means is adapted to determine for each carrier in said at least one respective ~~carrier~~-subset a number of bits equal to said first number of bits and a gain value through linear interpolation between said first gain value and said second gain value.

10. (currently amended): The constellation information receiving arrangement according to claim 7. further comprising:

means to receive a description of said at least one respective ~~carrier~~-subset; and

means to interpret said description of said at least one respective ~~carrier~~-subset.

11. (cancelled).

12. (cancelled).